Conducting External Independent Technical Reviews:

Alternative Methods, Ground Rules, and Challenges

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Presentation Overview

- Demand for external review
- Alternative review frameworks
  - Technical products/research
  - Decision documents
- Challenges with external review
- Recommendations

Why is there a demand for external review?

- Need for internal review of technical analyses and decision documents is not new
  - Error checking
  - Consistency with guidance and policy
  - Validity of results
- Need for external review is driven by
  - Public scrutiny
  - Lack of or inadequate internal review
  - Credibility gap

Defensive-Reactive Posture

- Environmental/Economic Tradeoffs
- Budget Constraints/Competition
- Sponsors and Cost-sharing
- Past Mistakes
- Risk & Uncertainty

- “Too close” to the problem

External Independent Review (EIR)

- External Independent Review is a proactive measure to
  - Increase credibility
  - Validate analytical techniques/findings
  - Verify study management processes
  - Improve quality of studies
- An EIR is
  - External: Review from outside of the Corps
  - Independent: Review free of bias related to the purpose of the original study

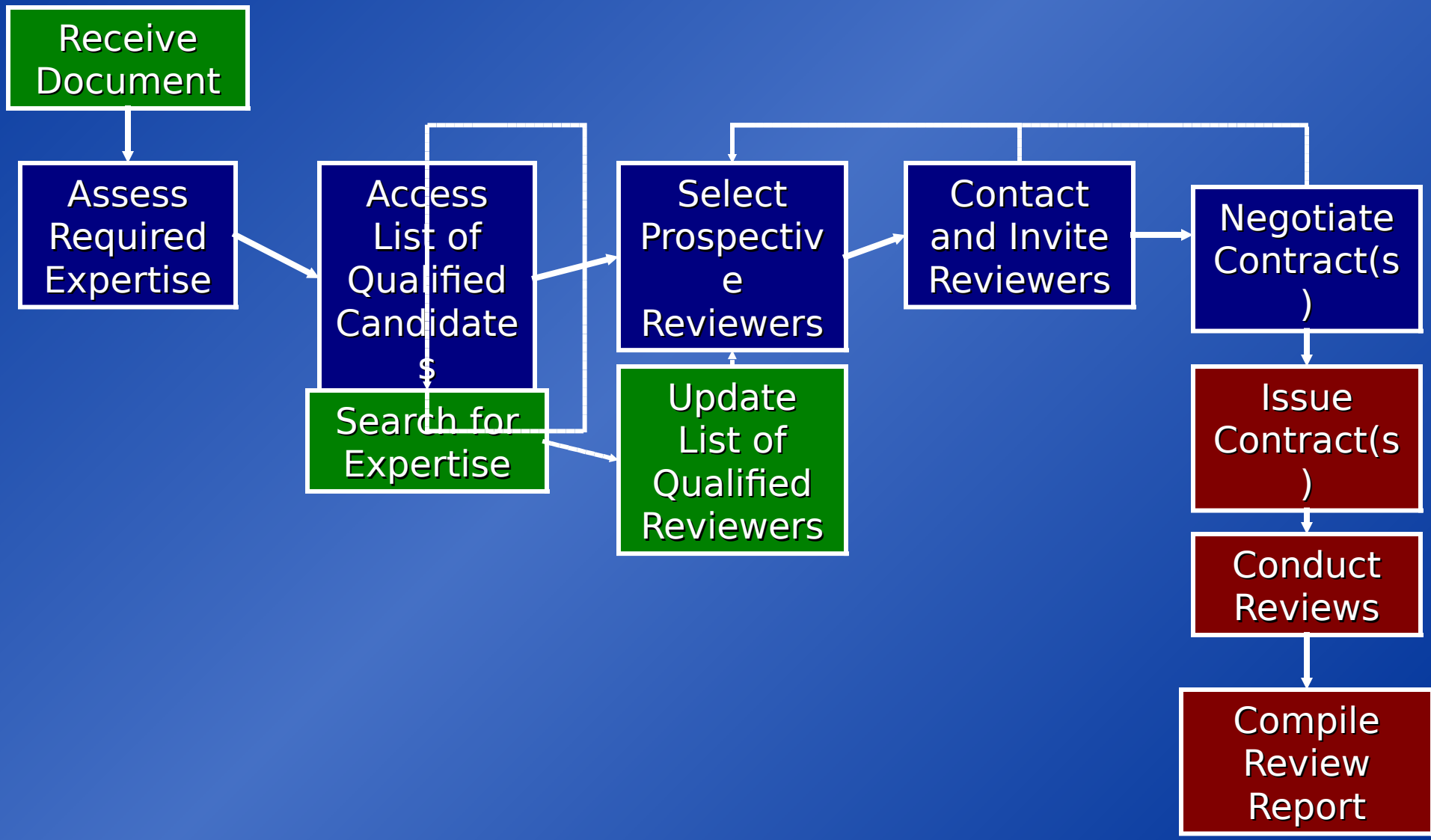
Two Existing Models for Conducting EIR's

- Conduct peer reviews
  - Technical research and development projects
  - Intermediate products/stages of planning studies
- Engage expert panel
  - Decision-documents
  - High impact or highly controversial projects

Peer Review Process

- Process and related contract in place for review of products of Navigation Economics Technologies (NETS) program
- Six technical research products reviewed since inception of the process
- Two primary components
  - Review Coordination
  - Execution and Compilation

Peer Review Coordination Process



Execution and Compilation

- Reviewers typically kept anonymous
- Four-section editorial format
  - Statement of original purpose and objectives (provided by IWR)
  - Summary paraphrasal of study conclusions
  - Summary review statement on validity and quality of findings
  - Individual comments and issues for resolution

Challenges with Peer Review Model

- Finding subject matter specialists can be difficult
  - Niche research and small (or unknown) reviewer pool
  - Those most directly qualified already employed in the project
- Experts have high rates
  - Lengthy reports
  - Comprehensive reference materials
  - Cost of review relative to cost of original project

Example Applications of Peer Review Model

- ***A Study of Short-Run Grain Movements on the Inland Waterway System***
- ***Shippers' Response to Changes in Transportation Costs and Time: The Mid America Grain Study***
- ***Tradable Permit Markets for Locks on Inland Waterways***
- ***Navigation System Simulation (NaSS) Design Document***
- ***Appointment Systems for Inland Waterway Traffic Control***

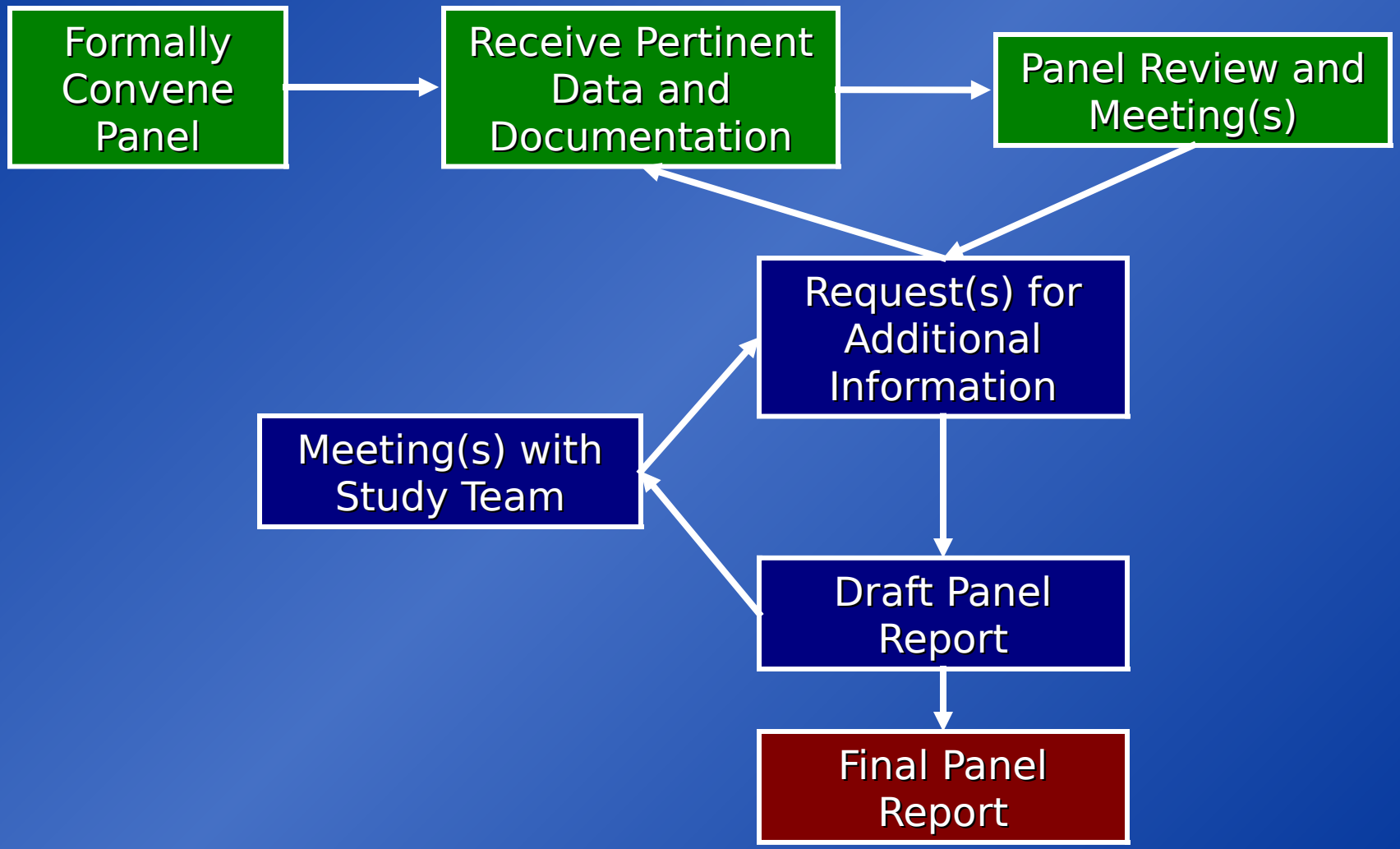
Expert Panel Review

- Expert panel review typically limited to extraordinary projects (not R&D)
  - High cost and narrowly higher benefits
  - Complex conceptual or technical requirements
  - Attention from DC
- Multiple experts convened as a panel to validate findings and recommendations
- Generally focuses on analyses, assumptions, models, etc. — not as much on policy and project implementation issues
- Not a substitute for internal agency review

Expert Panel Review Process

- Process for conducting panel review has some similarities with peer review process
  - Must identify qualified and independent panel members
  - Must select, negotiate contracts, etc
  - Panel members review and comment on data, procedures, and documents
- But also some differences
  - Panel members will have broader focus on planning and decision-making
  - Panel known to all study partners
  - Panel interacts with one another to identify and resolve issues

Expert Panel Review Process



Ground Rules for Panel Review

- Limited direct contact of Panel with study partners
- Review contractor acts as liaison among study partners and Panel
  - Delivery of data and documents
  - Scheduling and facilitation of teleconferences and face-to-face meetings
  - Submission of final Panel review reports

Ground Rules for Panel Review

- Panel seeks consensus on issue resolution, but free to disagree
  - Liaison schedules and facilitates issue resolution meetings
  - Any dissenting opinions are documented explicitly
- Panel identifies chief spokesperson and chief report writer

Challenges of Expert Panel Review Model

- Panel often convened “at the end” of the study to be reviewed
  - Long history of data collection, data processing, and documentation
  - Must dig up old information ($$)
- Panel can be viewed as adversaries who
  - Do not know the history…
  - Do not understand the circumstances…
  - Are not grounded in reality…
  - Are increasing study costs…

Challenges of Expert Panel Review Model

- Multiple study partners (with different responsibilities) can make scheduling and facilitation difficult
  - Panel members
  - District
  - Division
  - HQ
  - District Contractor
  - Review Contractor
  - Sponsor
- Delays and extensions are not uncommon

Example Applications of Expert Panel Review Model

- ***Delaware River Main Channel Deepening Project and Reanalysis of Project Benefits and Costs***
- ***External Independent Economic Opinion on Identifying and Measuring NED Benefits: Navigation Improvements (Port of Iberia, LA)***
- ***An Evaluation of the Risk of Water Shortages in the Lower Peninsula, Virginia (King William Reservoir)***
- ***Economic Impact of Water Services in New York City (pending)***

Recommendations: Take an Offensive-Proactive Posture

- Build external review process into a study or project in its development stages
- Convene an expert advisory panel to oversee progress and results
- Seek independent peer review or expert input at analytical milestones